

Montana DEQ Forest Fire Smoke Advisory

August 27, 2007

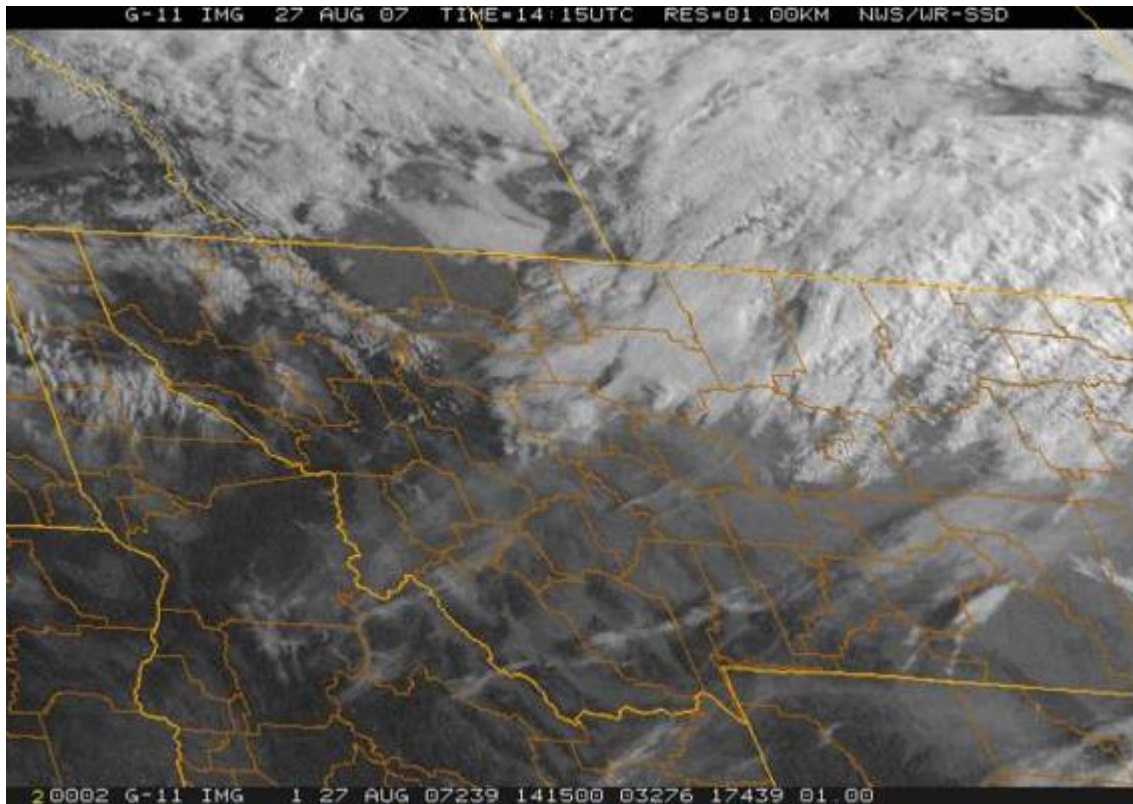
10:00 AM Monday

FORECAST:

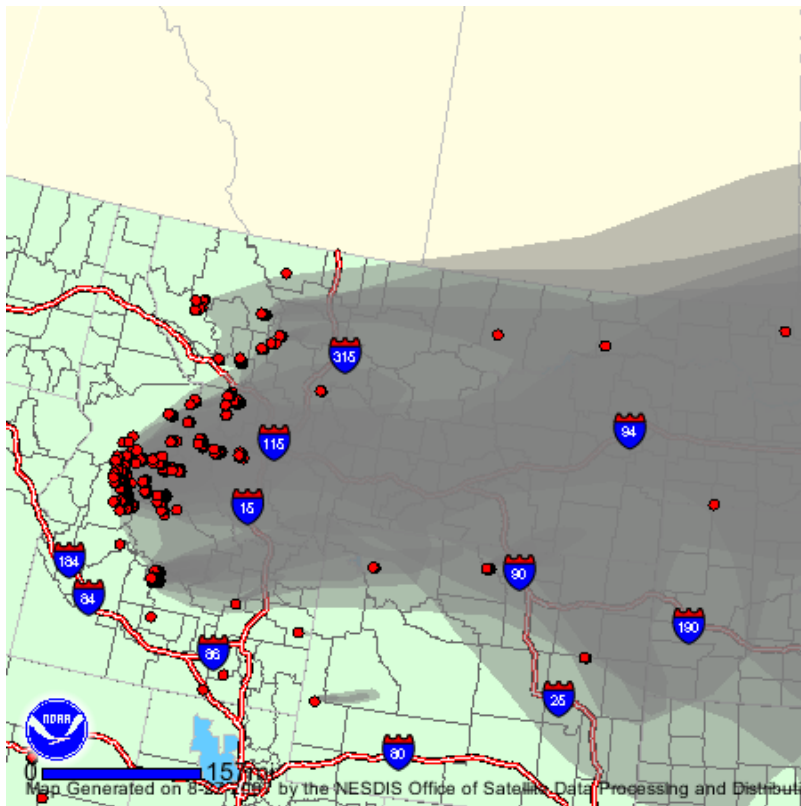
The fires in Idaho and Montana were active yesterday but most of the smoke is staying aloft right now and is headed steadily east. Moderate conditions are still present in some western Montana communities from local fires but only the southwestern corner of the state is receiving new smoke this morning. Many of the fires in the Krassel complex west of Salmon, Idaho remained active through the night and smoke from those fires is just overhead in the Wisdom, Butte, Bozeman, and Dillon areas.

The flow aloft is from the west today as a shallow, cool air mass from Canada has pushed into the northern half of the state producing northerly surface winds east of the divide. We will be transitioning into a weak ridge for the next day and stagnant conditions are not expected. Later this morning, the smoke aloft will start to mix down to the surface and smoke will be noticeable under the thicker parts of the plume of smoke aloft. Hazy skies will be evident across the southern half of the state. Direct plume impacts from local fires could be a problem this afternoon and evening. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions.

A morning satellite photo centered on Great Falls is illustrated below:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage).



Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lq_fire2.php

This satellite photo taken at 6:00 PM last night shows the smoke plumes from the fires in Idaho moving across into southwestern Montana.



This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

Montana DEQ Forest Fire Smoke Advisory

August 27, 2007

10:00 AM Monday

DISCUSSION:

The smoke from recent fire activity is mostly aloft but [moderate](#) smoke levels are currently impacting Whitefish, Kalispell, and Missoula. There is a lot of smoke in the southwest corner of the state as some of the fires continued to be active throughout the night and still have plumes visible downwind this morning. Surface conditions are OK now but are expected to get worse occasionally later this morning and in the afternoon. The advisories in the table below represent conditions between midnight and 8 AM and may change substantially through the day. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the [visibility guidelines](#) to determine current conditions.

[John Coefield](#)

Meteorologist

Montana Department of Environmental Quality

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

Updated 10 AM August 27, 2007

These advisories represent conditions between midnight and 8 AM and may change substantially through the day

<u>HAZARDOUS</u>	
<u>VERY UNHEALTHY</u>	
<u>UNHEALTHY</u>	
<u>UNHEALTHY FOR SENSITIVE GROUPS</u>	
<u>MODERATE</u>	Whitefish T24 Kalispell T24 Missoula T24

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm)	Visibility value from twice/day reporting stations
(est)	estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.